

## PATENT ABSTRACTS OF JAPAN

(11)Publication number : 05-279447

(43)Date of publication of application : 26.10.1993

(51)Int.Cl.

C08G 18/61

B01D 71/54

C08G 18/44

(21)Application number : 04-077338

(71)Applicant : MITSUBISHI RAYON CO LTD

(22)Date of filing : 31.03.1992

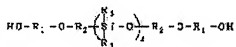
(72)Inventor : KAWAI YOSHIO  
KAMO JUN

## (54) SILICON-BASED BLOCK COPOLYMER AND MEMBRANE MADE THEREOF

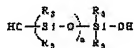
## (57)Abstract:

**PURPOSE:** To obtain a new copolymer giving a separation membrane having high gas transmission coefficient by reacting two kinds of siloxanediols with a diisocyanate and a carbonate diol.

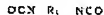
**CONSTITUTION:** The objective block copolymer is produced by using (A) a siloxanediol of formula I (R1 and R2 are bivalent hydrocarbon group; R3 is methyl or phenyl; (1) is  $\geq 8$ ), (B) a siloxanediol of formula II ((m) is  $\geq 8$ ), (C) a diisocyanate of formula III (R4 is aliphatic group, alicyclic group or aromatic group) and (D) a carbonate diol of formula IV (R5 is aliphatic group; (n) is  $\geq 3$ ) as starting raw materials, dissolving the component C in an organic solvent, reacting with the component A and the component B in nitrogen gas stream and finally adding and reacting the component D to the above reaction product.



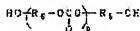
I



II



III



IV